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MEMORANDUM OF THE PRESENT STATUS OF DENDROCTONUS BEETLES ON THE CLOVER CREEK PLATEAU, OREGON, AND ON THE YAWKEY TRACT, NEAR FT. KLAMATH, OREGON

J.E. PATTERSON
ASHLAND, OREGON
SEPTEMBER 19, 1925

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Ashland, Oregon.
September 19,
1925.

J. E. Patterson,
Assistant Entomologist.

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In the following memorandum is given an estimate of the present pine beetle losses in the two areas above mentioned. This estimate is based mainly on the annual losses of the year 1924 but also to some extent on the current year's loss, of which perhaps 30% was distinguishable when the surveys were made.

The field examinations upon which the following estimates are based were made by the personnel of the Ashland Station of the Bureau of Entomology at the request of Mr. J. F. Kimball the local representative of the parties owning the timbered lands involved. Mr. Kimball desired this information as a basis for planning and carrying out control measures against the insects responsible and by these means reduce the annual barkbeetle losses to the minimum on both areas.

The methods used in securing these data consisted of strip surveys, principally along roads and on section lines, and block surveys of entire sections or their subdivisions. Both methods were used on each area and both areas were thoroughly covered in this manner. It is believed that the insect loss figures for the year 1924 are accurate within 10% as practically all trees killed during that year were easily distinguished. It must be kept in mind, however, that the total insect loss during the current year cannot be determined at this date by actual count of attacked trees because many are still green and therfore not discernible as infested trees, and also because many trees will yet be attacked before the season of activity is over. Therefore the figures given in this paper are estimates based on an interpolation between the total 1924 loss and the visible 1925 loss. They are, however, sufficiently accurate for the purpose intended, i.e. as a basis for estimating the amount of infestation which should be removed to secure protection from immediate future losses and also the cost of such work.

Only two species of pines and only two species of barkbeetles are involved. The western yellow pine represents 90% of the pine stand on the areas surveyed. The infestation in this species represents the western pine beetle, Dendroctonus brevicomis and the mountain pine beetle, Dendroctonus monticolae; the former attacking perhaps 95% of the infested trees. The sugar pine losses are due almost entirely to attacks by the mountain pine beetle. The two tree and insect species are not segregated in the loss figures owing to the fact that the infestation is primarily Dendroctonus brevicomis in yellow pine.

CLOVER CREEK PLATEAU:

This area comprises approximately 40,000 acres on which an epidemic infestation exists at the present time. It was surveyed September 8, 9, and 10. The following figures are an estimate of the amount of infestation on a per tree basis which will pass the winter in attacked trees:

Twp. 38, SR 6 E.

Sec:	Acres:	Number trees:	
13	640	60	
14	640	60	
22	640	80	
23	640	130	
24	640	160	
25	640	175	
26	640	175	
27	640	160	
33	640	50	
34	640	140	
35	640	160	
36	640	175	Total:
			1,525

Twp. 38, SR 7 E:

17	640	120	
18	640	60	
19	640	100	
20	320	50	
28	320	60	
29	480	120	
30	640	160	
31	640	160	
32	640	160	
33	640	150	
34	640	150	
			1,290

Twp: 39, SR 6 E:

Sec:	Acres:	Number trees:	
1	640	150	
2	640	130	
3	640	40	
4	640	40	
9	640	40	
10	640	40	
11	640	80	
12	640	120	
13	640	90	
14	640	50	
15	640	50	
16	640	40	
22	640	40	
23	640	50	
24	640	60	
25	640	60	
26	640	60	Total:
			1,140

Twp. 39, SR 7 E:

3	640	150	
4	640	150	
5	640	160	
6	640	160	
7	640	160	
8	640	180	
9	640	180	
10	640	160	
11	640	120	
14	640	120	
15	640	175	
16	640	180	
17	640	180	
18	640	160	
19	640	75	
20	640	150	
21	640	150	
22	640	150	
23	640	140	
24	640	140	
25	320	75	
26	640	120	
27	320	70	
29	160	40	
30	540	60	
35	200	50	
			3,455
		Total for area	7,410
		Average per section	120

YAKEY TRACT:

There is approximately 7,000 acres of this area supporting an epidemic infestation of barkbeetles. The area was surveyed September 14, 15, and 16. Mr. McLean and Mr. Baum of Mr. Kimball's organization assisted the Bureau during the field work. Their valued assistance was greatly appreciated and hereby acknowledged. While an active infestation exists on the entire tract highly epidemic conditions occur only on about 5,500 acres situated in the west central part of the area.

The greatest loss has occurred recently within a comparatively small area in sections 17, 18, 19, 20, 29, and 30. These sections are very heavily infested.

The estimated infestation, on a per tree basis, which will overwinter is:

Twp. 32, SR 7½ E:

Sec:	Acres:	Number trees:
7	400	40
8	640	60
16	480	60
17	640	180
18	640	180
19	640	190
20	640	170
21	640	150
22	160	30
25	200	20
26	320	20
27	640	80
28	640	100
29	640	100
30	640	130
31	320	30
32	560	40
33	600	35
34	540	80
35	640	30
36	640	30
		Total: 1,755

Average per section 146